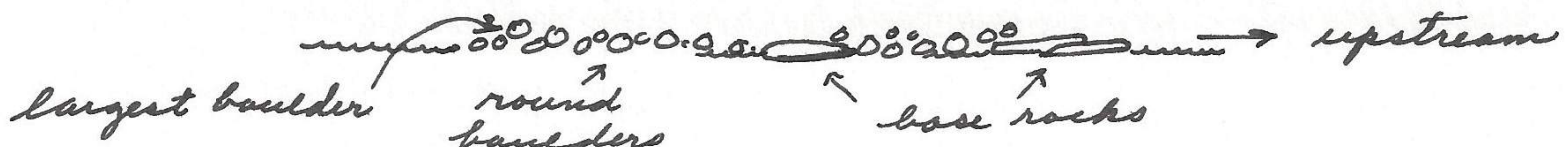
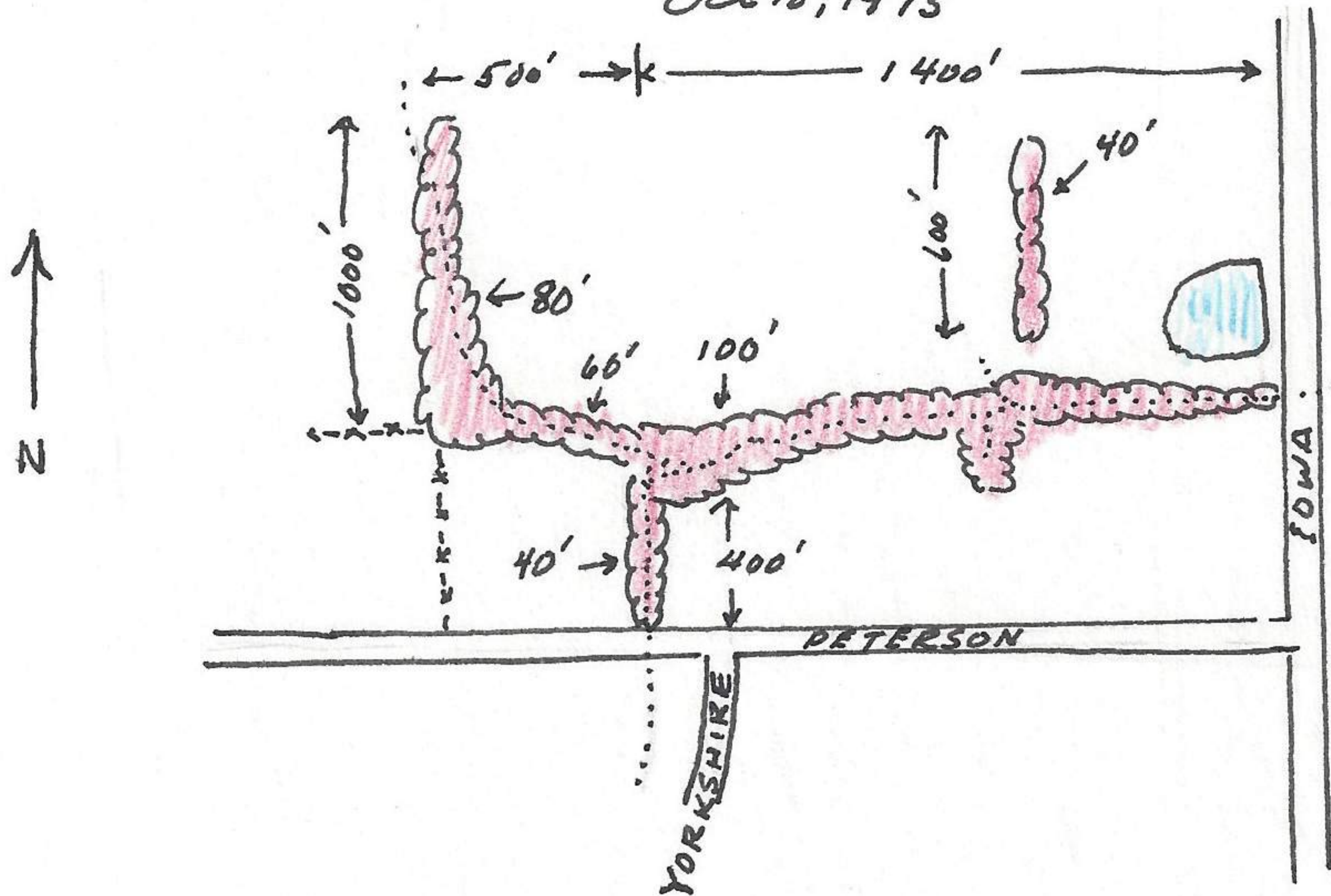


rocks now exposed and general arrangement is thus:

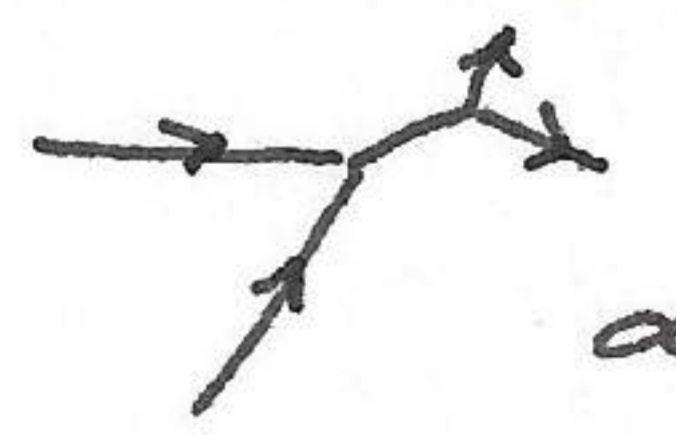


2 great blue heron, 8 killdeer and 1 great horned owl in area.

SE Sec 23, R18E, T12S, Lawrence, Douglas Co., Kansas
Oct 18, 1975



29,000 sq feet
of tree ^{area} x 8 feet
height occupied
by birds = 2,323,000
possible positions in
trees. Actually
60% ^{of area} was occupied
and ^{average} concentration
about 50% or
278,760 birds. Some
trees probably 1 per
sq. foot.

In areas of concentration, especially under trees without leaves but protected on all sides by other leafed trees, the fecal white-wash was 90% coverage, some ground leaves (poison ivy) the standing leaves were 100 covered. This coverage varied according to size of tree, large cottonwood for instance did not have white fecal material beneath the tree. Lower limbs covered with white in some areas. On the basis of recollection these birds have been inhabiting these trees for the last 12 days. About 3/4 hr before sunrise the birds are already calling and leaving the roosting area in about the same degree of departure as their arrival in the evening. Most of the birds have left the roost before sunrise. This evening noted two groups of grackles converge in flight at 60 degrees.  They formed a solid group for approx 4 seconds and then divided and continued on their original flight direction. There was a second of confusion at the moment of contact. In other words one group did not attempt to evade the other group by predetermined decision.

Lone Star Lake, Douglas Co., Kansas
Oct. 19, 1975

Annette and I circumnavigated Lone Star Lake, keeping close to shore. Left at outlet at 12:30 P.M., upper end SW bay 1:25, upper end S bay 1:55, Boat house 2:25, upper end E bay 2:35, return to outlet overflow 3:00 or 2 1/2 hours. Wind from SW.